

10/586826  
AP20 Rec'd PCT/PTO 20 JUL 2006  
Docket No.: 13156-00062-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Ferenc Molnar et al.

Application No.: National Phase of  
PCT/EP2005/000534

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: CATALYST FOR THE CARBONYLATION  
OF OXIRAINES

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

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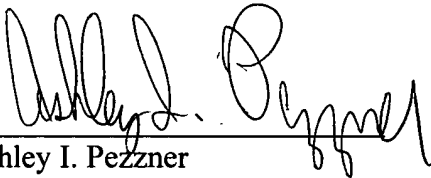
Application No.: National Phase of PCT/EP2005/000534

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The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 13156-00062-US.

Respectfully submitted,

By   
Ashley I. Pezzner

Registration No.: 35,646  
CONNOLLY BOVE LODGE & HUTZ LLP  
1007 North Orange Street  
P.O. Box 2207  
Wilmington, Delaware 19899  
(302) 658-9141  
(302) 658-5614 (Fax)  
Attorney for Applicant

475284

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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449A/B/PTO				Completed Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Ferenc Molnar
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	13156-00062-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-2005/0256320	11-17-2005	Luinstra et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	BA	GB-1,020,575	02-23-1966	Imperial Chemical House		
	BB	EP-0 577 206	01-05-1994	Shell International Research		
	BC	EP-0 688 806	12-27-1995	Tokuyama Corporation		
	BD	JP-09-169753	06-30-1997	Tokuyama Corporation		See Translation
	BE	WO-03/050154	06-19-2003	Cornell Research Foundation Inc.		
	BF	WO-2004/012860	02-12-2004	BASF		See US 2005/0256320

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Ferenc, Molnar et al., "Multisite Catalysis: A Mechanistic Study of $\beta$ -Lactone Synthesis from Epoxides and CO - Insights into a Difficult Case of Homogeneous Catalysis", Chem. Eur. J. 9(6) (2003), pp. 1273-1280.	
	CB	Lee, J. T. et al., "Synthesis of $\beta$ -Lactones by the Regioselective, Cobalt and Lewis Acid Catalyzed Carbonylation of Simple and Functionalized Epoxides", J. Org. Chem. 66 (2001), pp. 5424-5426.	
	CC	Kamiya, Yoshio et al., "The Reaction of Small Ring Compound with Carbon Monoxide The Carbonylation of Oxirane", The Chemical Society of Japan, Chemistry Letters (1980), pp. 1549-1552.	
	CD	Hinterding, K. et al., "Regioselective Carbomethoxylation of Chiral Epoxides: A New Route to Enantiomerically Pure $\beta$ -Hydroxy Esters", J. Org. Chem. 64 (1999), pp. 2164-2165.	
	CE	Getzler, Y. D.Y.L. et al., "Synthesis of $\beta$ -Lactones: A Highly Active and Selective Catalyst for Epoxide Carbonylation", J. Am. Chem. Soc. 124(7) (2002), pp. 1174-1175.	
	CF	Allmendinger, M., "Dissertation: Investigations on the Carbonylation of Oxiraines - Syntheses of Aliphatic Polyesters from Epoxides and Carbon Monoxide", University Ulm, 2003, pp. 109-115.	
	CG	Mahadevan, V. et al., "[Lewis Acid][Co(CO) <sub>4</sub> ] Complexes: A Versatile Class of Catalysts for Carbonylative Ring Expansion of Epoxides and Aziridines", Angew. Chem. Int. Ed. 41(15) (2002), pp. 2781-2784.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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